

**Notice of Allowability**

Application No.

09/828,845

Applicant(s)

BERNARD ET AL.

Examiner

Krisna Lim

Art Unit

2153

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 12/06/04.
2. ☒ The allowed claim(s) is/are 31-49 and 56-74.
3. ☒ The drawings filed on 13 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

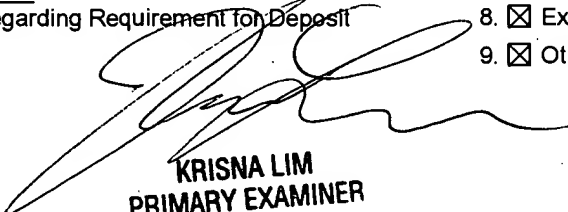
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input checked="" type="checkbox"/> Other <u>Restriction</u> .                     |

  
KRISNA LIM  
PRIMARY EXAMINER

Art Unit: 2153

1. Claims 1-27 and 30-74 are pending for examination and claims 28-29 were canceled. And, the amendment filed 12/06/2004 is acknowledged.

2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-27, 30 and 50-55, drawn to a mobile platform and a method of extending the coverage area of a network to provide network access to a mobile platform via at least one mobile node, each mobile node including at least two directional antenna for establishing communication links with at least two disparate nodes, comprising the steps of: a) transmitting route data to a mobile node; and b) exchanging signal over link between a network interface and the mobile node, classified in Class 455, subclass 3,01.
- II. Claims 31-49 and 56-74, drawn to a method of extending the coverage area of a network that is accessible via at one network interface node by establishing link among the at least one network interface node and a plurality of mobile nodes, wherein each mobile node includes at least three directional antenna for creating links to the other nodes to, comprising the steps of: a) determining possible links to other nodes based on route data for the nodes; b) scoring each remaining link; c) eliminating the lowest scoring links when the number of remaining links for the mobile node exceeds the maximum number of links permitted; and d) aiming the directional antennas of the mobile node to create the remain link, classified in Class 709, subclass 238.

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations. (M.P.E.P. § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the Invention I does not require the steps of: a) determining possible links to other nodes based on route data for the

nodes; b) scoring each remaining link; c) eliminating the lowest scoring links the number of remaining links for the mobile node exceeds the maximum number of links permitted; and d) aiming the directional antennas of the mobile node to create the remain link. The subcombination has separate utility such as Claims 31-49 and 56-74, drawn to a method of extending the coverage area of a network that is accessible via at one network interface node by establishing link among the at least one network interface node and a plurality of mobile nodes, wherein each mobile node includes at least three directional antenna for creating links to the other nodes to, the method lacks

3. These inventions are distinct for the reasons given above, and the search required for each Group is different and not co-extensive for examination purpose.

4. For example, the searches for the two inventions would not be co-extensive because these groups would require different searches on PTO's classification class and subclass as following:

(a) Group I search (claims 1-27 and 30 and 50-55) would require use of search class 455, subclass 3.01 (which would not required for the group II).

(b) Group II search (claims 31-49 and 56--74) would require use of search class 709, subclass 238 (which would not require for the group I).

5. A telephone call was made to Mr. Robert C. Bertin April 7, 2005 to request an oral election to the above restriction requirement. Mr. Bertin elected claims 31-49 and 56-74 and reserve the right to file a continuation for claims 1-30 and 50-55.

6. **Examiner's Amendment**

An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

7. Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Robert C. Bertin (Reg. No. 41,488) on 04/08/2005 and 4/13/2005.

Cancel claims 1-27, 30 and 50-55 in favor of filing a continuation.

In claim 32, replace – 30 – by – 31 --.

In claims 57-63, 65-68 and 72-74, replace – 55 – by – 56 --.

8. Pursuant to 37 C.F.R. 1.109 and M.P.E.P 1302.14, the following is an Examiner's Statement of Reasons for Allowance:

The prior arts of record do not teach a method and a system, comprising means and steps of: a) determining a possible links to other nodes based on route data for the nodes; b) scoring each remaining link; c) eliminating the lowest scoring links when the number of remaining links for the mobile node exceeds the maximum number of links permitted; and d) aiming the directional antennas of the mobile node to create the remain links.

The examiner considers the applicants' claims 31-49 and 56-74 to be allowable based on the claim interpretation and the aforesaid prior arts of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisna Lim whose telephone number is 571-272-3956. The examiner can normally be reached on Monday to Wednesday and Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KI

April 15, 2005



KRISNA LIM  
PRIMARY EXAMINER